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EXAMINER
GRANT, C

ART UNIT 2611 PAPER NUMBER 12

DATE MAILED:

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/584,477

Applicant(s)
SKLAR et al.

Examiner
Christopher Grant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on Jun 11, 2001

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-13 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-4 and 7-13 is/are rejected.

7) ☒ Claim(s) 5 and 6 is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

20) ☐ Other:

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DETAILED ACTION

Reissue Applications

1. The original patent, or an affidavit or declaration as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

The original ribboned copy of the patent has not been surrendered. See MPEP 1416.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 10-11 and 13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The disclosure fails to support the limitation “**the control signals being based directly on the encoded RF signals output from the antenna**” now recited in claim 10, lines 14-16 and the limitation “**wherein the steering step comprising steering the antenna based on the encoded RF signals output from the antenna, which have not been modulated**” now recited

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in claim 13, lines 1-4. Note that the specification at column 4, line 64 - column 5, line 12 describes that the antenna interface (11) receives control status signals from the antenna controller (17) and that the antenna controller (17) receives various antenna position related signals from the navigation system (15) and the GPS (16). Therefore, the control signals **are not based directly on the encoded RF signals** as indicated in claim 10. Moreover, steering the antenna is not based **on the encoded RF signals output from the antenna, which have not been modulated** as recited in claim 13. The newly introduced limitations described above is considered as new matter and must be canceled from the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polivka et al. (Polivka) and Rabowsky et al. (Rabowsky).

Considering claims 10 and 12-13, Polivka discloses a satellite television system and corresponding method that provides television channels to each passenger on an aircraft (see figure 3A) from at least one satellite comprising the following:

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- a) an antenna (265, 266) (figure 6) comprising steering means (433, 432), see col. 12, lines 17-41;
- b) antenna control means (270, 291) for providing control signals to the antenna (col. 8, lines 29-48, col. 9, lines 40-63 and col. 12, lines 17-41) and for downconverting encoded RF signals to provide downconverted RF signals (col. 5, lines 23-38), the control signals (or steering signals) being based directly on the encoded RF signals output from the antenna (via demux (303), see col. 8, lines 29-48, col. 9, lines 40-63 and col. 12, lines 17-41); and
- c) receiver (280) (figure 3A);

Although Polivka discloses an antenna control means (270), he fails to specifically disclose (i) a modulator (ii) distribution system for distributing modulated signals to each passenger's seat, and seat electronics circuitry for demodulating, decoding and (iii) D/A converting the modulated and encoded signals into signals that are provided to each passenger's seat as recited in the claim.

Rabowsky discloses an entertainment distribution system in an aircraft comprising the following:

- (i) a modulator (96,100,104)(fig. 2);
- (ii) a distribution system (22) (fig. 1) for distributing modulated signals to each passenger's seat and
- (iii) seat electronics circuitry (VSEB 60 fig.1; detail structure in fig. 3) comprising a demodulator (116), decoder (130,131) for decoding and digital to analog converter (132, 133) and a tuner (156)(fig. 4). Rabowsky's system facilitates transmission of a large number of audio/video signals

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which is adaptable for expansion, has less wiring and minimizes expense because of fewer component parts in an aircraft. See col. figures 1-4 and col. 6, lines 21-38.

Therefore, it would have been obvious to one of ordinary skill in the art to modify Polivka's system to include a modulator, a distribution system for distributing modulated signals to each passenger's seat and seat electronics circuitry comprising a demodulator, decoder and D/A converter, as taught by Rabowsky, for the advantages of distributing a large number of audio/video signals to each passenger, providing less wiring and minimizing expense.

6. Claims 1-2, 4, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polivka and Rabowsky as applied to claim 10 above, and further in view of Muhlhauser et al. (Muhlhauser).

Considering claim 11, the combined systems of Polivka and Rabowsky fails to specifically disclose left hand and right hand circularly polarized signals as recited in the claim.

Muhlhauser discloses a satellite receiver system comprising an antenna for receiving both left and right handed circular polarized RF signals. A downconverter is inherently present for frequency converting the RF signals. The advantages of Muhlhauser's system are that it is small in size, cost effective and has the ability to receive signals from different satellite systems (i.e. left hand circular polarized satellite systems as well as right hand circular polarized satellite systems). See col. 2, line 58 - col. 4, line 34 and figures 9A-9E.

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Therefore, it would have been obvious to one of ordinary skill in the art to modify the combined systems Polivka and Rabowsky to include left and right hand circularly polarized RF signals, as taught by Muhlhauser, for the advantage of providing a system having the ability to receive RF signals from circularly polarized satellite transmission systems.

The limitations recited in claim 1 correspond to the limitations described above in claim 11, wherein the additionally claimed “and for feeding back the status signals to the antenna control means which are used to steer the antenna to lock it onto the RF signals received from the satellite” is met by Polivka’s receiver (280K) (col. 9, lines 40-63).

Claim 2 is met by the combined systems of Polivka, Rabowsky and Muhlhauser, wherein the claimed modulator comprising a combiner is met by Rabowsky's modulator (96,100,104) comprising combiner (104).

Claim 4 is met by the combined systems of Polivka, Rabowsky and Muhlhauser, wherein the antenna controller is met by Polivka's controller (270) and the antenna interface is inherently met by Muhlhauser's circuit that receives and processes the left and right handed circular polarized signals.

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Considering claim 7, the combined systems Polivka, Rabowsky and Muhlhauser fail to specifically disclose, a mother board, receiver card, a computer processor, and flash disk as recited in the claim.

However, a mother board, receiver, a computer processor and flash disk are routine devices found in DBS or DSS receivers for the purposes of holding components, receiving, processing and storing program signals transmitted from satellite(s). Any standard video receiver must have a mother board for holding components, a receiver device for receiving signals, a processor for processing signals and a memory device for storing instructions and/or received video information.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the combined systems Polivka, Rabowsky and Muhlhauser to include a mother board, a receiver, a computer processor and flash disk for the advantages of holding components, receiving, processing and storing video programs transmitted from satellite(s).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Polivka, Rabowsky and Muhlhauser as applied to claim 1 above, and further in view of Tagawa et al. (Tagawa).

Considering claim 3, the combined systems of Polivka Rabowsky and Muhlhauser fail to specifically disclose that the seat electronics circuitry comprises game electronics for displaying games on the display as recited in the claim.

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Tagawa discloses an entertainment system in an aircraft comprising a seat electronics circuitry (30) comprising game electronics (35d) for the advantage of providing game as another source of entertainment for individual passengers on an aircraft. See col. 5 line 55 - col. 6, line 28.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the combined systems of Polivka, Rabowsky and Muhlhauser to include seat electronics circuitry comprising game electronics for displaying games on the display, as taught by Tagawa, for the advantage of providing games as another choice of entertainment for individual passengers on an aircraft.

8. Claims 8-9 and 12 (alternatively) are rejected under 35 U.S.C. 103(a) as being unpatentable over Polivka, Rabowsky and Muhlhauser.

Considering claims 8 and 12, Polivka discloses a satellite television system that provides live television programming to passengers on an aircraft (see figure 3A). Note the following:

- a) steering step is performed by an antenna (265, 266) (figure 6) comprising steering means (433, 432), see col. 12, lines 17-41;
- b) downconverting (291) (figure 3A); and
- c) processing step is performed by receiver (280-1) (figure 3A) with feedback status signal (305), see col. 9, lines 40 - 63.

Polivka fails to specifically disclose the following steps:

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- i) left and right hand circularly polarized RF signals;
- ii) modulating, distributing modulated and encoded video and audio signals, receiving the modulated and encoded video and audio signals at seat electronics circuitry, and demodulating, decoding and D/A converting the modulated and encoded video and audio signals at the seat as recited in the claim.

Muhlhauser discloses a satellite receiver system comprising an antenna for receiving both left and right handed circular polarized RF signals. The advantages of Muhlhauser's system are that it has the ability to receive signals from plural and/or different satellite systems (i.e. left hand circular polarized satellite systems as well as right hand circular polarized satellite systems). See col. 2, line 58 - col. 4, line 34 and figures 9A-9E.

Rabowsky discloses an entertainment distribution system in an aircraft comprising the following:

- a) a modulator (96,100,104)(fig. 2) for modulating;
- b) a video and audio distribution system (22) (fig. 1) for distributing modulated signals to each passenger's seat and
- c) seat electronics circuitry (VSEB (60) fig.1; detail structure in fig. 3) for receiving modulated and encoded video and audio signals comprising a demodulator (116), decoder (130,131) and a digital to analog converter (132, 133). Rabowsky's system facilitates transmission of a large number of audio/video signals which is adaptable for expansion, has less wiring and minimizes

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expense because of fewer component parts in an aircraft. See col. figures 1-4 and col. 6, lines 21-38.

Therefore, it would have been obvious to one of ordinary skill in the art to modify Polivka's system to include left and right hand circularly polarized RF signals, as taught by Muhlhauser, for the advantage of providing a system having the ability to receive RF signals from circularly polarized satellite transmission systems.

Further, it would have been obvious to one of ordinary skill in the art to modify the combined systems of Polivka and Muhlhauser to include modulating, distributing modulated and encoded video and audio signals, receiving the modulated and encoded video and audio signals at seat electronics circuitry, and demodulating, decoding and D/A converting the modulated and encoded video and audio signals at the seat, as taught by Rabowsky, for the advantages of distributing a large number of audio/video signals to each passenger, providing less wiring and minimizing expense.

Claim 9 is met by the combined systems of Polivka, Muhlhauser and Rabowsky, wherein the step of generating signals derived from the downconverted signal to steer the antenna and lock it onto the RF signals received from satellite are specifically met by Polivka's steering discussed in col. 12, lines 17-41 and downconverting of polarized signals discussed by Muhlhauser.

Allowable Subject Matter

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9. Claims 5-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Note to applicant

10. Applicant is notified that any subsequent amendment to the specification and/or claims must comply with 37 CFR 1.121(b).

Response to Arguments

11. Applicant's arguments filed 6/11/2001 have been fully considered but they are not persuasive.

Response to applicant's arguments:

A) Applicant argues that (i) the rejection of claims 1-4 and 7-10 in the current application is similar to the rejection of the claims in the parent application (08/667,225) and that (ii) comments in the reply filed 5/6/1998 in the parent application (08/667,225) were persuasive because the parent application was allowed. Applicant provided a copy of the file history of the parent application to the examiner on 2/22/2001. The file history of the parent application has been made of record as paper #6 in the current application.

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(Response). First, applicant should note that in a reissue application there is no presumption of validity attached to the claims which were previously issued in the parent application. Secondly, the references (prior art) cited in the rejection of the current application and the parent application are exactly the same. However, the contents of the rejection of the current application **are different** from the contents of the rejection of the parent application. For example, note the following: (i) the rejection of the claims in the instant application now points out that Polivka teaches downconverting encoded (compressed) RF signals, while in the parent application, this point was not clearly made by the examiner and (ii) the Podowski reference was not used in rejecting the claims in the instant application, while in the parent application, the Podowski reference was used to reject at least claim 1. Therefore, responding to arguments in the reply filed in the 5/6/1998 in the parent application would not resolve the issues in the current application.

B) Applicant argues that **“Thus, unlike Polivka which has his receiver 280-1 positioned communicatively between his antennas 265R, 266R and his antenna controller (control processor 270).....the present invention as recited in claim 10 has the antenna controller positioned communicatively between the antenna and the receiver...”** on page 9 (last paragraph) - page 10, line 3 of the amendment filed 6/11/2001.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (described above) are not recited in the rejected claim(s). Although the claims are interpreted in light of the

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specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Note that the claim 10 recites “*(a) an antenna.....(b) an antenna controller....(c) a receiver coupled to the antenna controller.....*”. Polivka clearly shows an antenna (265, 266), an antenna controller (270,291) and a receiver (280-1) (i.e. 295,294,290,301,303,311) that is **coupled** to the controller (270,291). Applicant should inspect claims 1 and 10 because they do not recite any particular position of the elements. Claims 1 and 10 merely recite that the receiver is coupled to the antenna controller. Therefore, applicant’s arguments are not persuasive.

(C) Applicant argues that “**In other words, the antenna controller of claim 10 does not receive downconverted signals so as to use those signals to steer an antenna, but rather it processes status signals derived from the antenna to steer the antenna. This is a major distinction, since Polivka must include some time delay in the downconverting....**” on page 10 (second paragraph) of the amendment filed 6/11/2001.

(Response) Claim 10 recites “*an antenna controller to provide the control signals to the antenna and for processing status signals derived from the antenna to steer the antenna....*”.

Whether there is a significant time delay or not, the point is that Polivka clearly discloses a controller (270, 291) that provides control signals to the antenna and processes status signals derived from the antenna (via elements 291, 295,301, 303,) to steer the antenna as required by the claims. Again, applicant’s arguments are not persuasive.

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(D) Applicant argues that “In Rabowsky.....optional compression circuitry are utilized” and “ in Rabowsky et al., encoded RF signals are not received by an antenna (as output by a satellite)” on page 11, lines 12-18 of the amendment filed 6/11/2001.

(Response) First, the Rabowsky reference was not provided by the examiner for the purpose of teaching encoded RF signals received by an antenna. The examiner clearly pointed out in the rejection that **Polivka teaches that the encoded RF signals are received by the antenna.**

Secondly, the Rabowsky reference was cited by the examiner to point out that (i) a modulator, (ii) a distribution system and (iii) seat electronics circuitry are used in an aircraft for the advantages described above in the rejection. Whether Rabowsky discloses utilizing an optional decompression circuitry or not, the point is that Rabowsky clearly discloses that decompressing or decoding is known to be performed at a seat location in an aircraft as required by the claims. Again, applicant’s arguments are not persuasive.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Grant whose telephone number is (703) 305-4755. The examiner can normally be reached on Monday-Friday from 8:00am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305 4700.



Christopher Grant

Primary Examiner

August 21, 2001